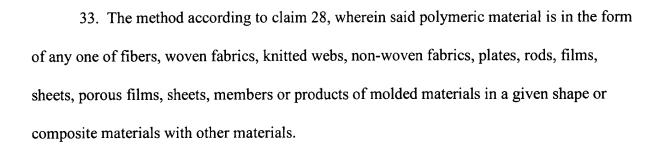


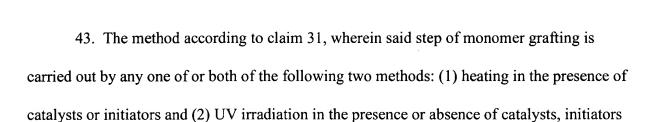
- 29. The method of modifying a polymeric material according to claim 28 further comprising the step (3) of monomer grafting.
- 30. The method of modifying a polymeric material according to claim 28, further comprising the step of a solvent-treatment prior to step (1).
- 31. The method of modifying a polymeric material according to claim 30, further comprising the step (3) of monomer grafting.
- 32. The method according to claim 28, wherein said polymeric material is a homopolymer or copolymer of one or more compounds selected from the group consisting of: olefins, vinyl compounds except olefins, vinylidene compounds and other compounds having carbon-carbon double bonds; polyesters, polyamides, polyimides, polyurethanes, polybenzoates, poly(benzoxazole)s, poly(benzthiazole)s, poly-(p-phenylene benzbisoxazole)s, poly-(p-phenylene benzbis-thiazole)s, poly(alkyl-p-hydroxybenzoate)s, poly(benzimidazole)s, carbon fiber materials, polyphenols, cellulose acetate, regenerated cellulose, vinylon, polychlel, casein, wool, silk and hemp (or ramie, jute).



- 34. The method according to claim 28, wherein said activation-treatment is at least one of the treatments selected from the group consisting of an ozone treatment, a plasma treatment, a UV irradiation treatment and a high voltage electric discharge treatment.
- 35. The method according to claim 28, wherein said hydrophilic polymer is at least one member selected from the group consisting of polyvinyl alcohol, carboxymethylcellulose, polyhydroxy ethylmethacrylate, poly-α-hydroxy vinylalcohol, polyacrylic acid, polyvinyl pyrrolidone, polyalkylene glycols, starche, silk fibroin, sericin, agar, gelatin, egg white and sodium arginate.
- 36. The method according to claim 29, wherein said monomer is a compound having a carbon-carbon double bond.
- 37. The method according to claim 31, wherein said monomer is a compound having a carbon-carbon double bond.



- 38. The method according to claim 36, wherein said monomer is at least one kind of monomer or a mixture of monomers selected from the following monomers; acrylic acid, methacrylic acid, vinyl acetate, 2-butene acid, ethylene sulfonic acid, hydroxyalkyl acrylate, hydroxyalkyl methacrylate, acryl amide, vinyl pyridine, vinyl pyrrolidone, vinyl carbazole, maleic anhydride and pyromellitic dianhydride.
- 39. The method according to claim 37, wherein said monomer is at least one kind of monomer or a mixture of monomers selected from the following monomers; acrylic acid, methacrylic acid, vinyl acetate, 2-butene acid, ethylene sulfonic acid, hydroxyalkyl acrylate, hydroxyalkyl methacrylate, acryl amide, vinyl pyridine, vinyl pyrrolidone, vinyl carbazole, maleic anhydride and pyromellitic dianhydride.
- 40. The method according to claim 28, wherein the step of a hydrophilic polymer-treatment is carried out in the presence of catalysts or initiators.
- 41. The method according to claim 29, wherein the step of monomer grafting is carried out in the presence of catalysts or initiators.
- 42. The method according to claim 29, wherein said step of monomer grafting is carried out by any one of or both of the following two methods: (1) heating in the presence of catalysts or initiators and (2) UV irradiation in the presence or absence of catalysts, initiators or photo-sensitizers.

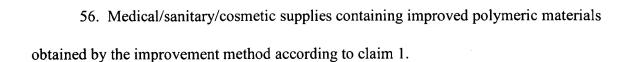


- 44. The method according to claim 40, wherein said initiators are at least one compound selected from the following compounds: peroxides, cerium ammonium nitrate (IV) and persulfates.
- 45. The method according to claim 41, wherein said initiators are at least one compound selected from the following compounds: peroxides, cerium ammonium nitrate (IV) and persulfates.
- 46. An improved polymeric material obtained by the improvement method according to claim 1.
- 47. Battery separators containing improved polymeric materials obtained by the improvement method according to claim 1.
- 48. Wiping/cleansing materials containing improved polymeric materials obtained by the improvement method according to claim 1.

or photo-sensitizers.



- 49. Filter mediums containing improved polymeric materials obtained by the improvement method according to claim 1.
- 50. Water absorption materials containing improved polymeric materials obtained by the improvement method according to claim 1.
- 51. Water retention materials containing improved polymeric materials obtained by the improvement method according to claim 1.
- 52. Materials for microorganism culture media containing improved polymeric materials obtained by the improvement method according to claim 1.
- 53. Composite materials containing improved polymeric materials obtained by the improvement method according to claim 1.
- 54. Members of writing materials containing improved polymeric materials obtained by the improvement method according to claim 1.
- 55. Polymeric materials improved in adhesion property obtained by the improvement method according to claim 1.



- 57. Synthetic papers made of improved polymeric materials obtained by the improvement method according to claim 1.
- 58. Brackets for straightening of irregular teeth containing improved polymeric materials obtained by the improvement method according to claim 1.
- 59. Textile products for clothing or inner battings of beds/bed clothing containing improved polymeric materials obtained by the improvement method according to claim 1.